Maths Trek

Exploring maths in the real world

K

NSW EARLY STAGE 1

Take a look inside!

As you explore these sample pages, look out for these handy notes, which point out the important information and exciting features of Maths Trek.

Sample Student Book Pages (NSW Syllabus Edition)

Firefly EDUCATION

Your Introduction to Maths Trek

Maths Trek is a whole-school numeracy program that provides everything you and your students need to explore maths in real-world contexts.

To maximise the benefits of the program, use the Student Book with the explicit teaching resources at Maths Trek Online to build, develop and strengthen each student's ability to work mathematically.

An adventure in maths for every student from Kindergarten to Year 6!

Maths Trek Online

Maths Trek Online is home to lesson guides, teaching slides, interactive teaching tools, printable differentiation tasks, investigation notes, Student Book answers, assessment resources, and preparation and planning documents.

Using the Student Book with Online

Topics

Use the online lesson guides and teaching slides to explicitly teach each topic. Then work together with your students to help them complete the scaffolded activities in the Student Book.

The Student Book is an integral part of the consolidation process. Once you have explicitly taught each concept, it is essential that students apply what they have learned to the activities.

Revision

Use the revision activities throughout the Student Book to consolidate each student's learning and identify strengths and weaknesses.

Investigations

Investigations provide students with opportunities to apply maths concepts learned in previous weeks to unfamiliar, extended mathematical problems.

Use the online teaching notes, exemplars, videos and printable resources to introduce and guide students through each investigation.

Work with your students to plan and complete each step of the investigation, including the Student Book activity.

Use the online share and discuss questions in the final step of the investigation to ensure students reflect, reason and communicate their understanding of what they have discovered.

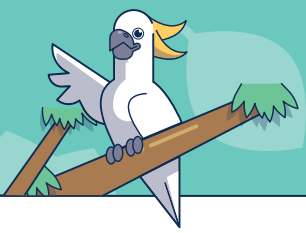
Assessment

Download the Semester Tests at Maths Trek Online to assess each student's understanding of the preceding topics. Each Test includes graded questions. Download the *Progress Checklists* to track student achievement in topics and investigations throughout the year.

Contents

Term 1

Term 2



Planning made easy

Maths Trek guides you and your students through a sequence of topics, revision and investigations.

As the year progresses, your students consolidate their learning and revisit concepts. They also have ample opportunity to apply what they've learned to unfamiliar, extended maths problems.

You'll find assessments in the Yearly Plan too – one for each semester. They assess each student's understanding of the preceding topics and are available to print at Maths Trek Online.

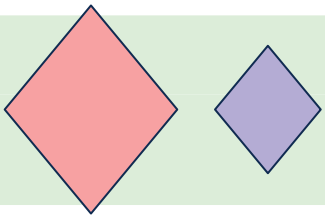
Term 3

* Log in to Maths Trek Online to download and print the Semester Tests. Conduct each Test over several sessions as required.

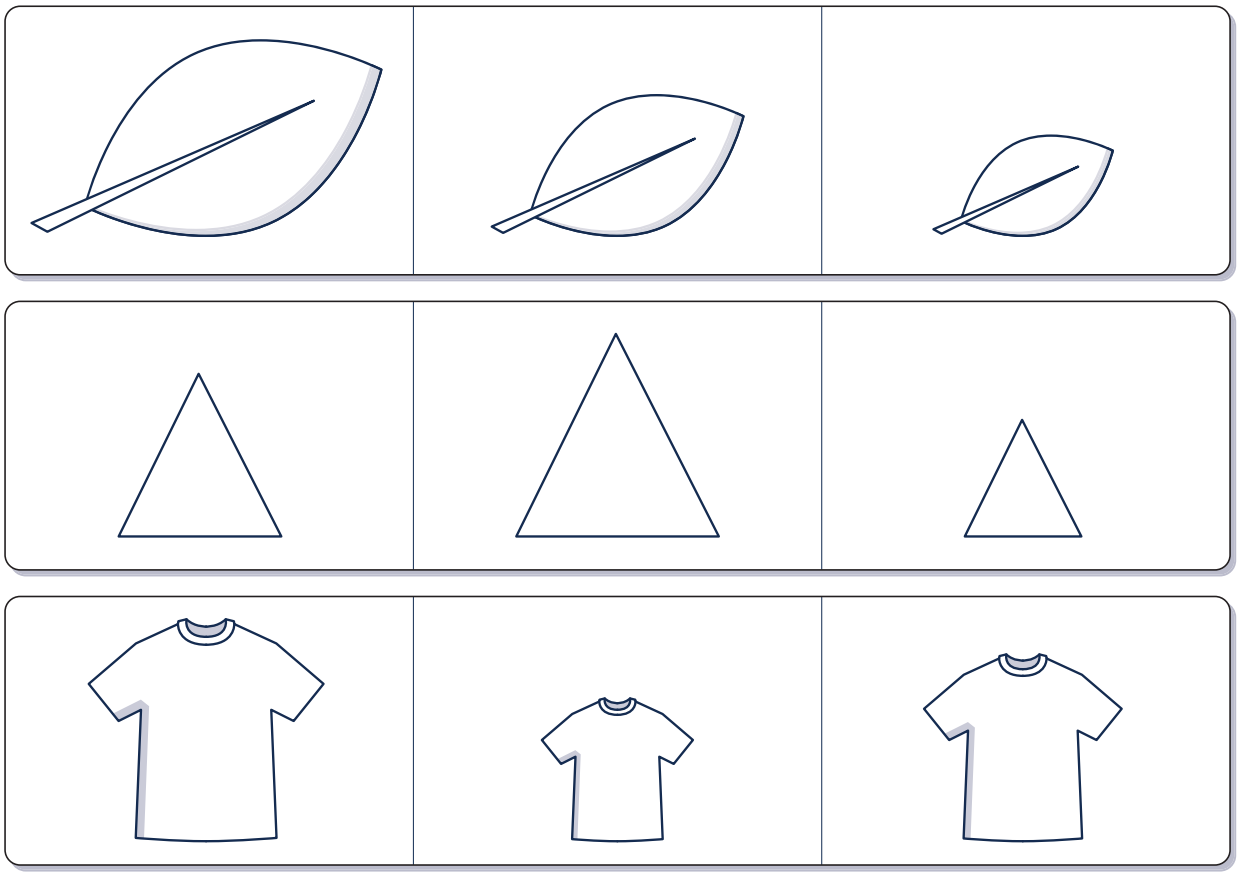
Unit 9.2

Area

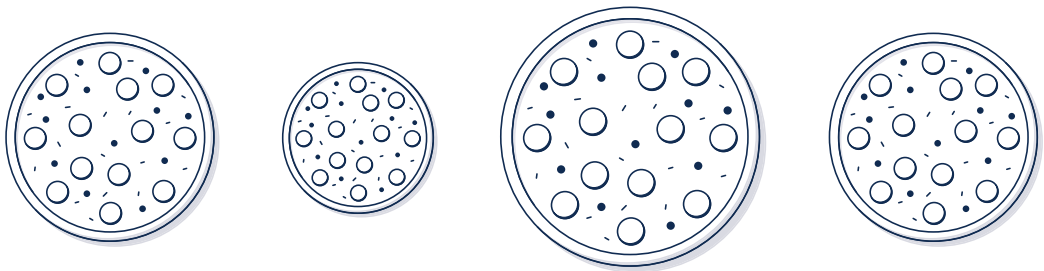
Area is the space inside a shape.



1. Colour the **largest** shape in each row. It has the largest area.



2. Circle the **smallest** pizza. It has the smallest area.



3. Colour the two pizzas that are the **same** size.

4. Tick the pizza you would eat if you were very hungry.
Tell a classmate why.

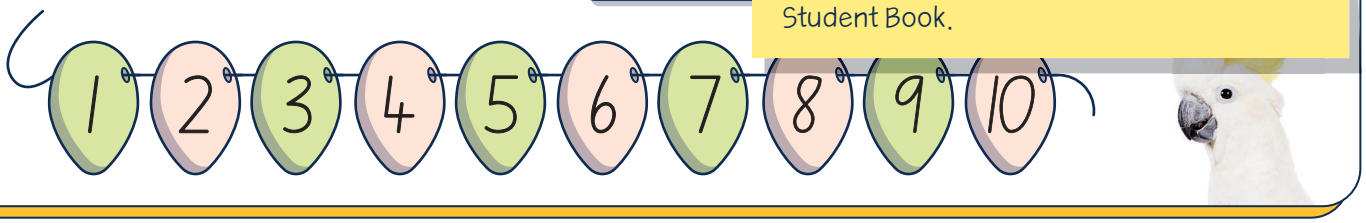
Unit 10.1

Count to 10

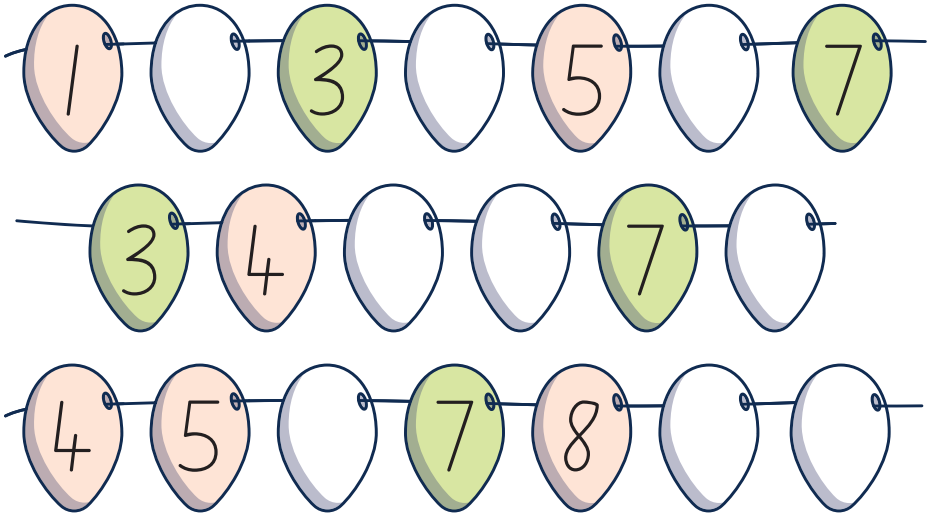
112 topics in Kindergarten!

From number and measurement to space and statistics, your students complete a variety of hands-on activities in the lesson and then apply what they've learned in the Student Book.

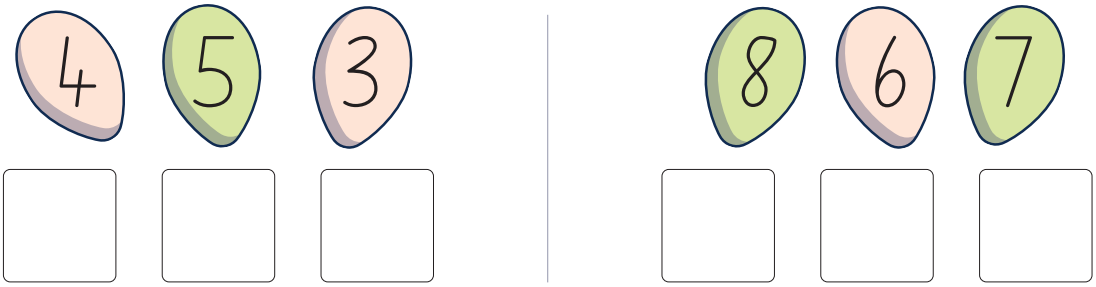
Point to each



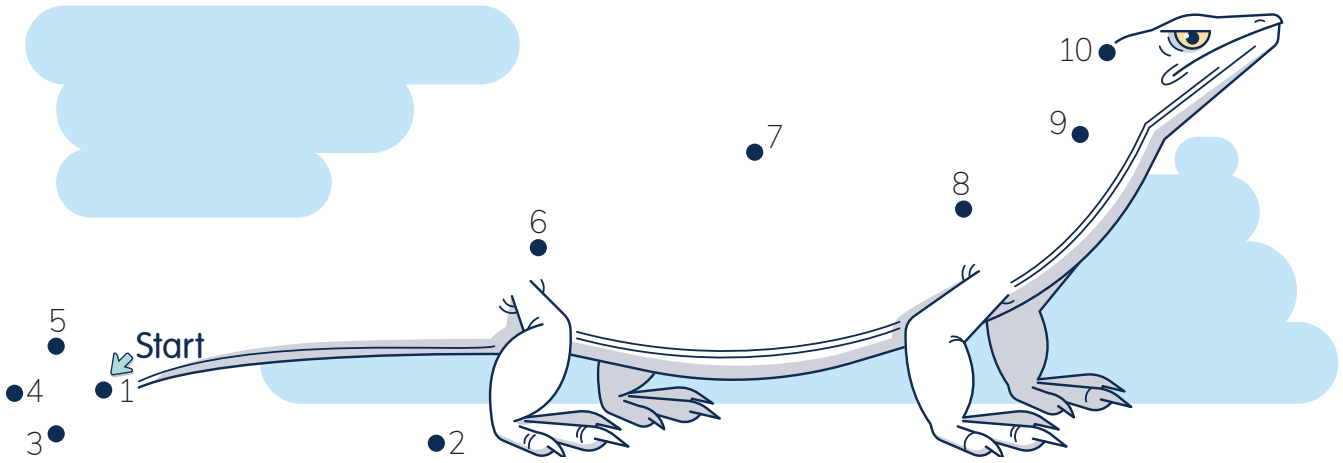
1 Write the missing numbers.



2 Write the numbers in order from **smallest** to **largest**.



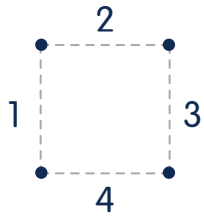
3 Join the dots.

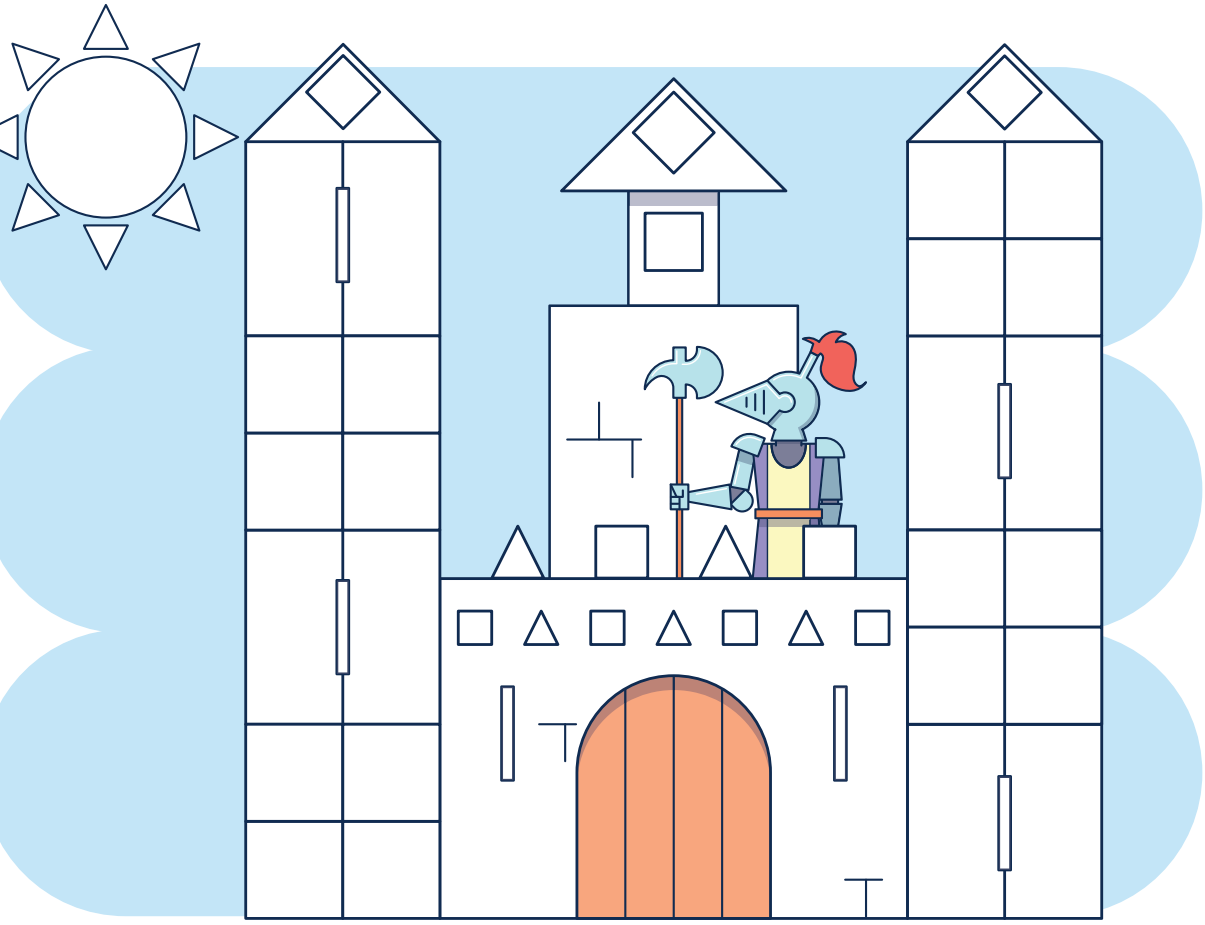


Unit 11.3

Squares

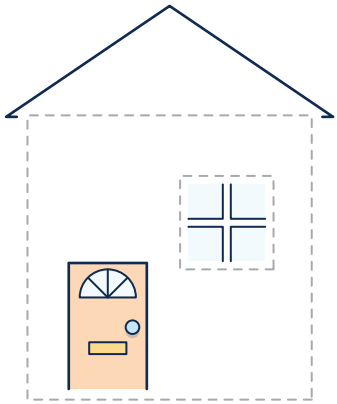
A square has 4 equal sides.

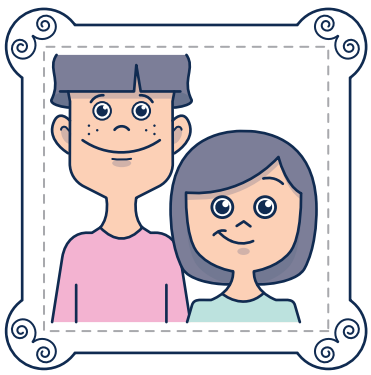


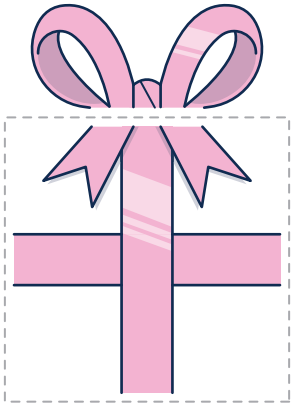


1 Colour the squares.

2 Trace the squares to complete the pictures.







Unit 13.2

Count backwards from 10

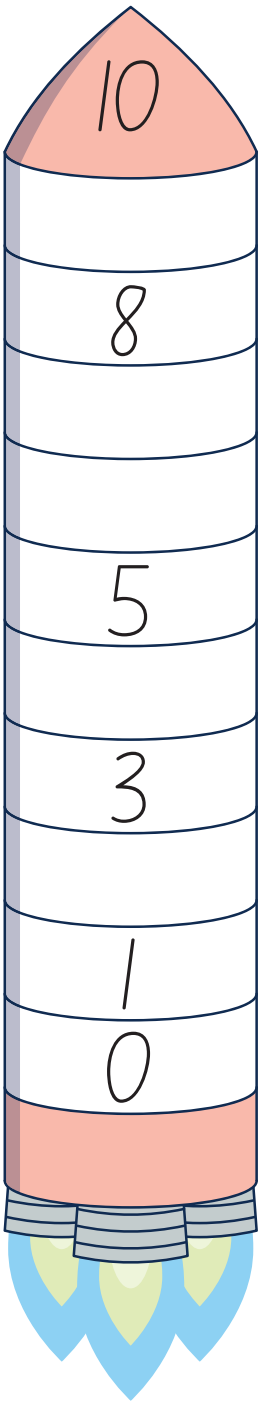
Trace the numbers. Count back from 10.

10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0

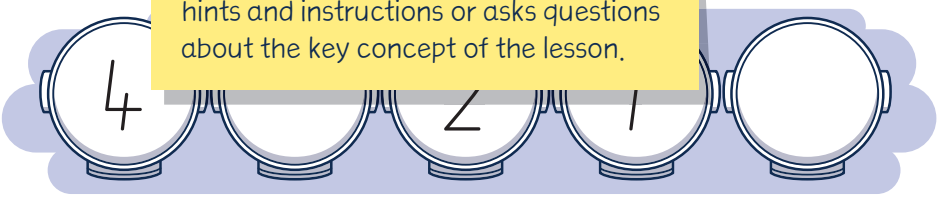
'What is the cockatoo saying?'

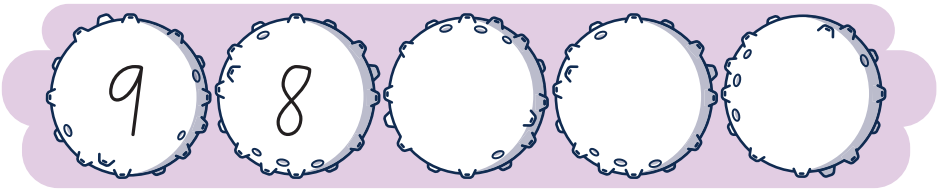
Your students can look out for our friendly cockatoo who provides simple hints and instructions or asks questions about the key concept of the lesson.

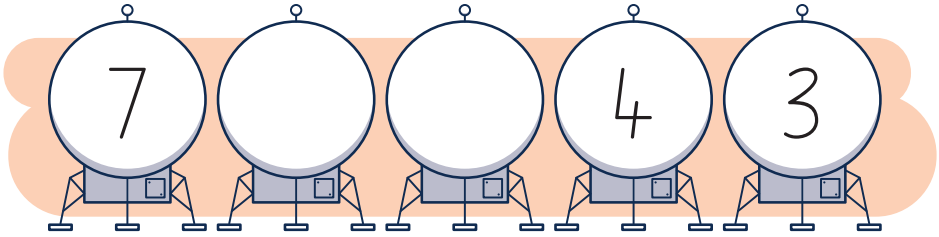
1. Count back from 10. Write the missing numbers.



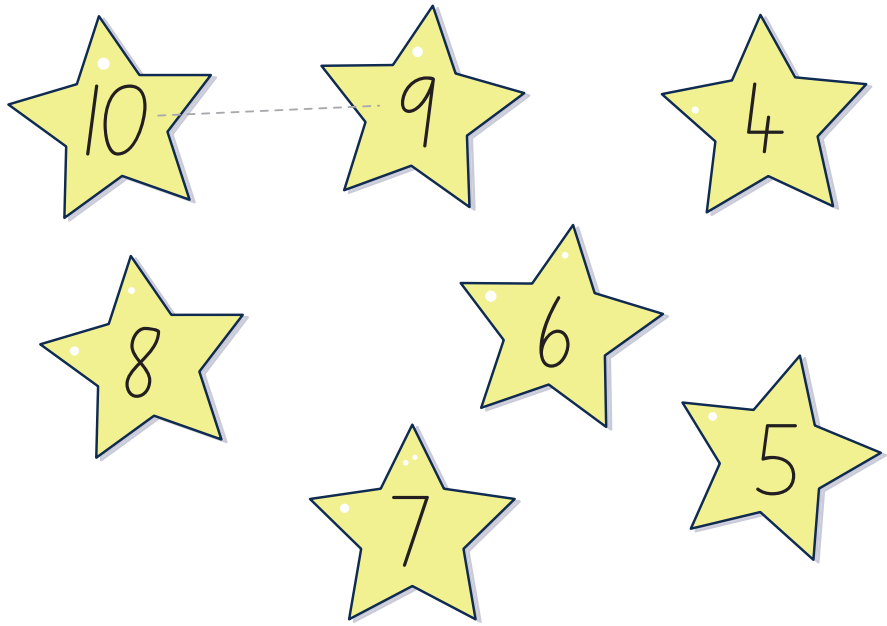
2. Write t







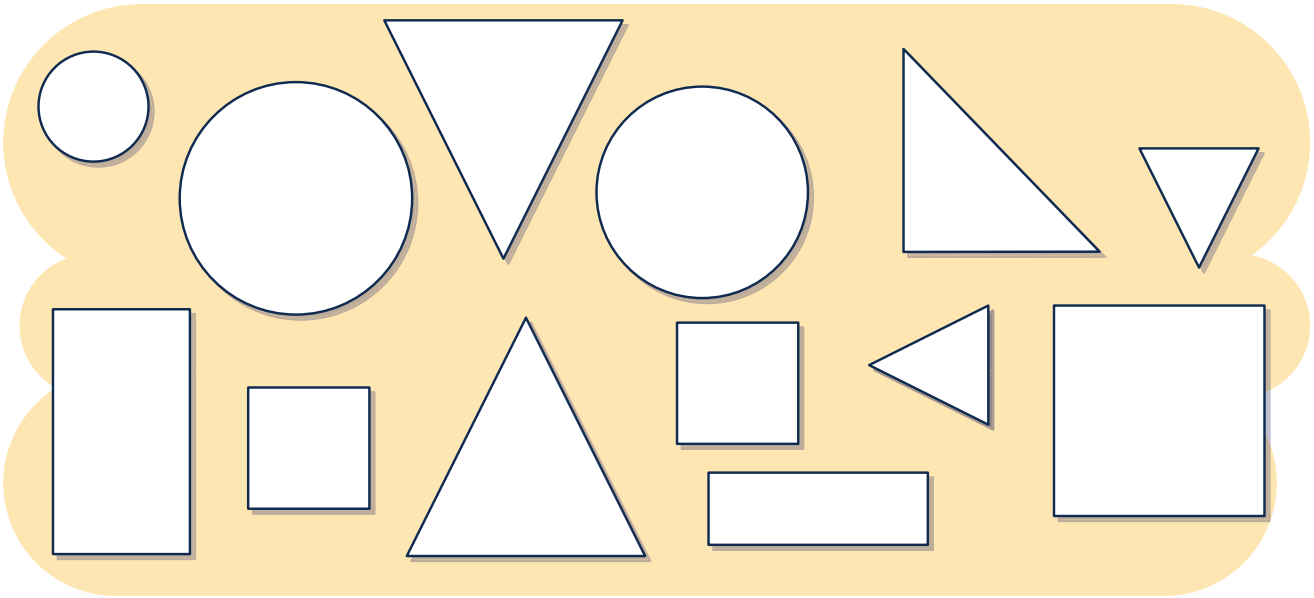
3. Count back from 10. Draw lines to match.



Unit 13.4

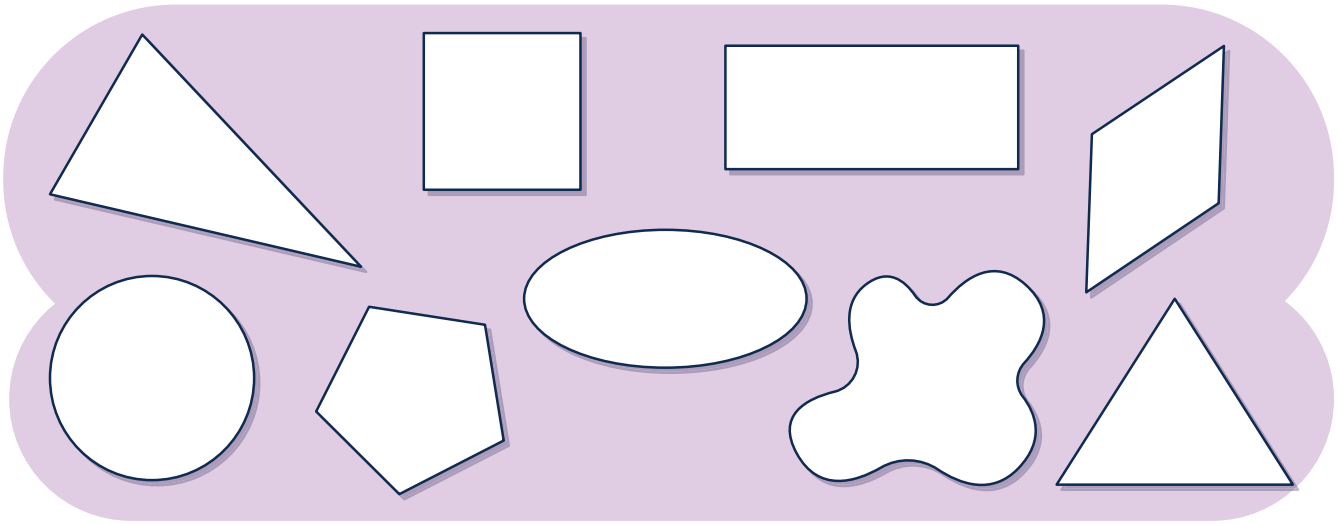
Sort shapes

1. Colour to sort the shapes.



2. Talk to a classmate about how you sorted the shapes.

3. Colour shapes with **straight** lines blue. Colour shapes with **curved** lines green.



4. How many shapes have 3 straight sides? ☐

5. How many shapes have 4 straight sides? ☐

6. Tick the shape with 5 straight sides and 5 corners.

Unit 14.1

Numbers before, after, in between

Point and count from 0 to 10.

0 1 2 3 4 5 6 7 8 9 10

1 Write the numbers **before** and **after**.

before		after
	4	

before		after
	2	

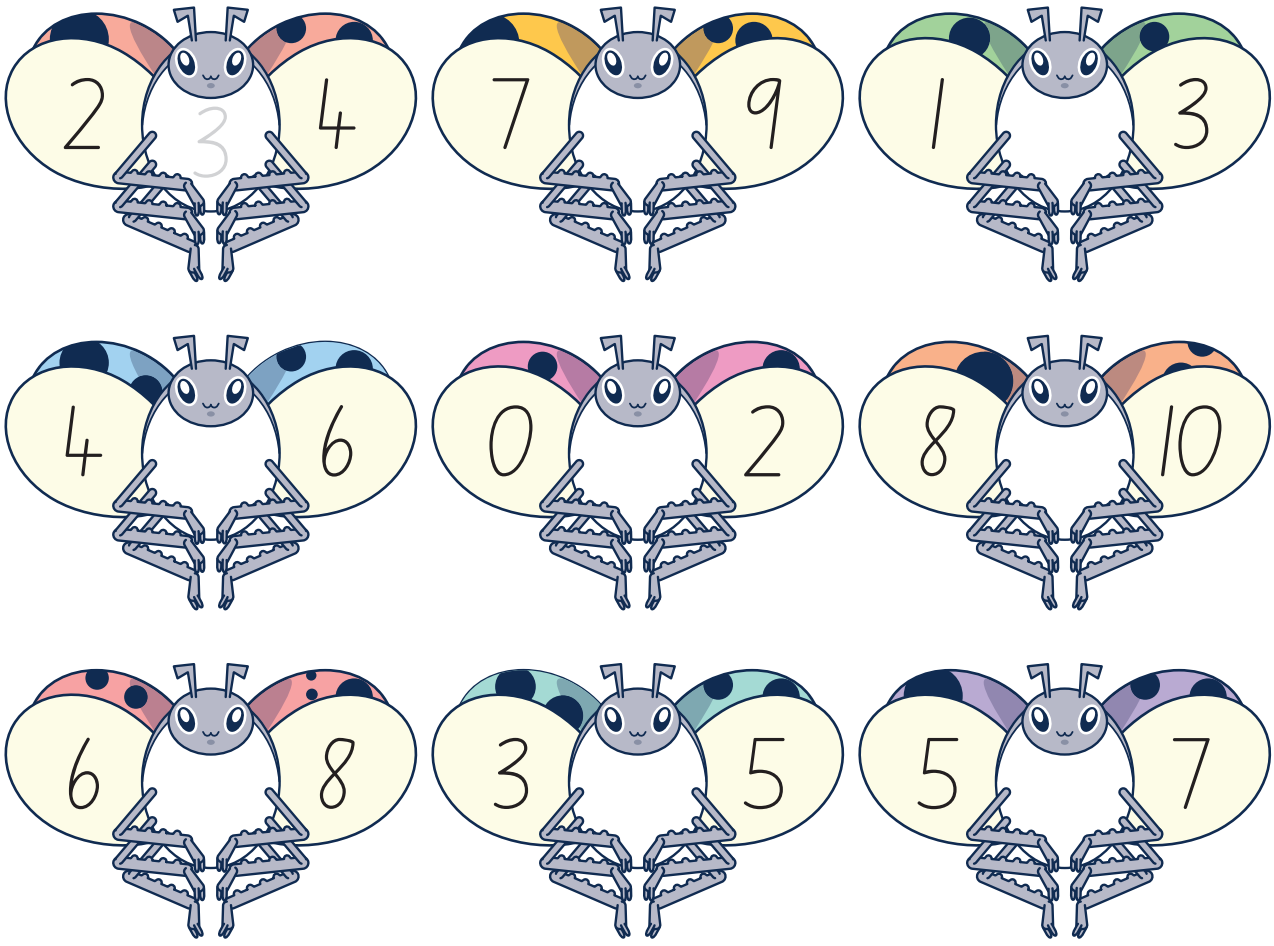
before		after
	7	

before		after
	9	

before		after
	5	

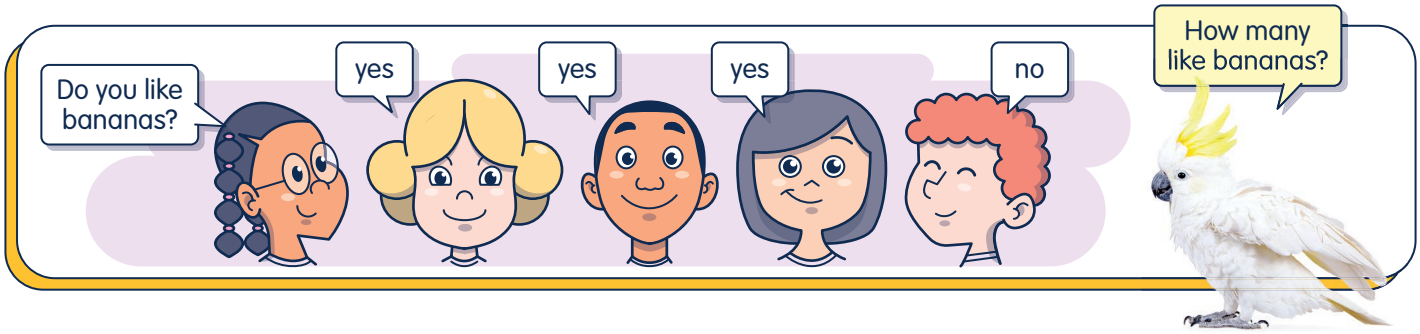
before		after
	8	

2 Write the numbers that are **in between**.



Unit 14.3

Ask questions to collect data



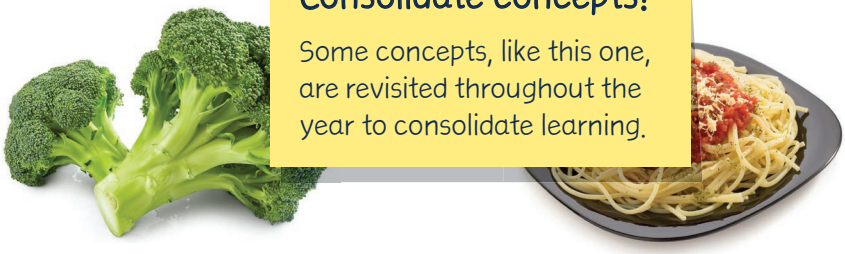
1 Do you like these foods? Colour yes or no.

Consolidate concepts!

Some concepts, like this one, are revisited throughout the year to consolidate learning.

strawberries

◯ yes ◯ no



broccoli

◯ yes ◯ no

spaghetti

◯ yes ◯ no

peas

◯ yes ◯ no

sausages

◯ yes ◯ no

macadamia nuts

◯ yes ◯ no

2 Talk to a classmate about which of these foods you like or do not like.

3 Ask six classmates: Do you like spaghetti?
Draw ☺ to show their answers.

Key ☺ = 1 person

						How many?
yes						
no						

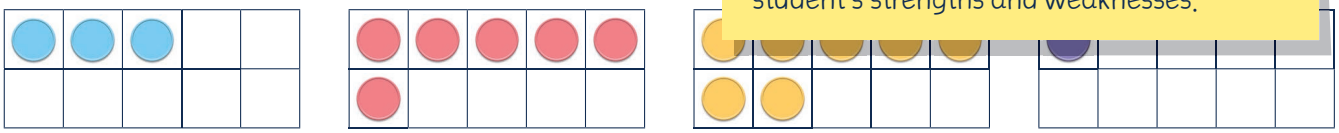
Unit 9.4

Revision Units 7–9

Regular revision

Every few weeks, your students complete revision activities based on the preceding topics. This regular revision is great for consolidating learning and identifying each student's strengths and weaknesses.

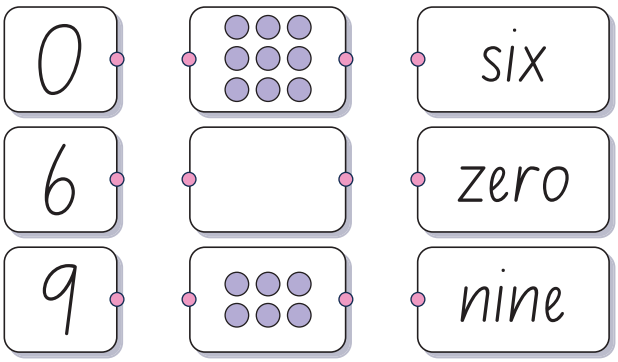
1. Draw more counters to show the numbers.



8 10 9 7

2. Circle the jar with **more** than 6 beans.

3. Draw lines to match.



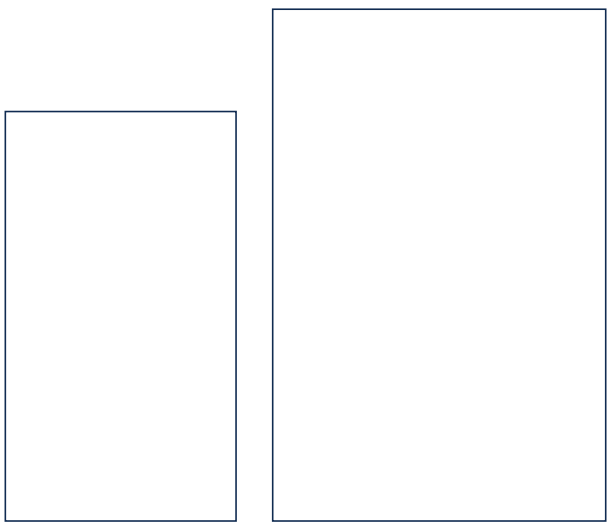
4. How many days in one week? ☐

Colour **today** blue.

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

5. Draw a ball **under** the chair.

6. Colour the shape with the **larger** area.



Unit 14.4

Revision Units 12–14

1 Write numbers **1 less than**.

2 Write numbers **1 more than**.

3 Write the number **before** and **after**.

before		after
	6	

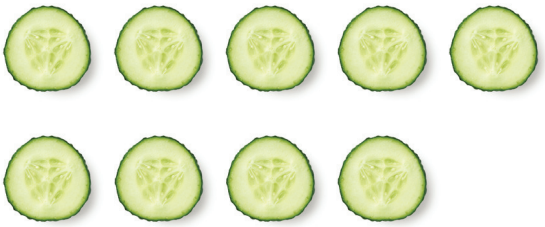
4 Write the number that is **in between**.

	in between	
7		9

5 Split 10 into two groups.

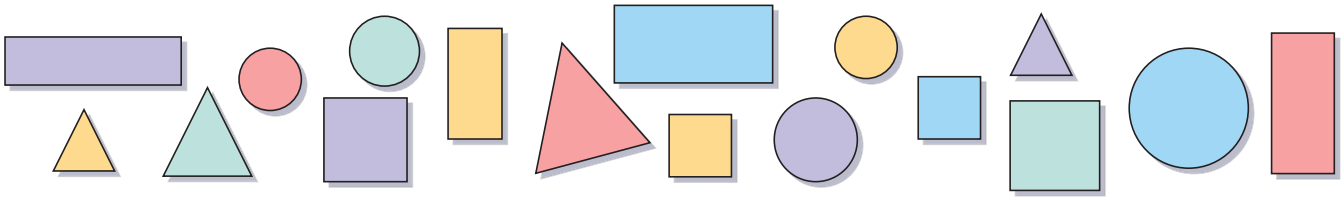
[ ] and [ ] is 10

6 Split 9 into two groups.



[ ] and [ ] is 9

7 Write how many.



circles [ ] squares [ ] triangles [ ] rectangles [ ]

8 Colour **today** red, **yesterday** blue and **tomorrow** green.

Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday

Investigation Unit 15

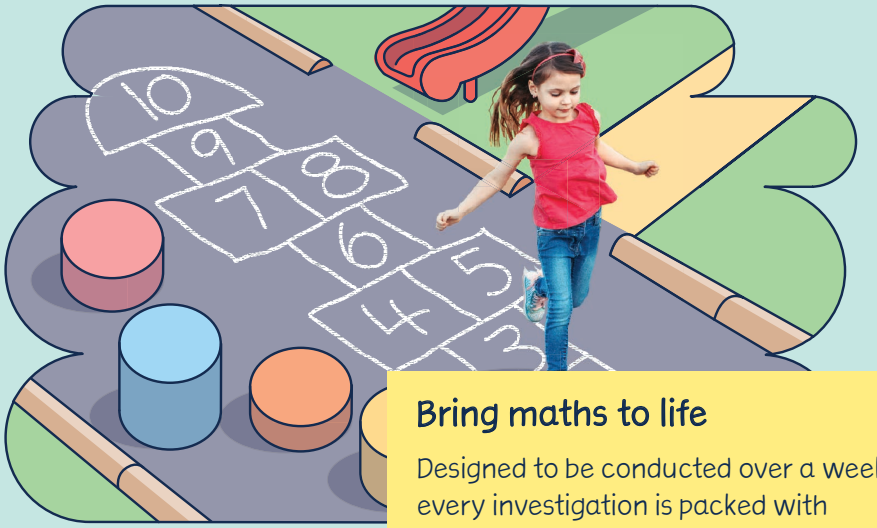
Hopscotch

Hop to it!

Design your own hopscotch game.

What shapes will you use?

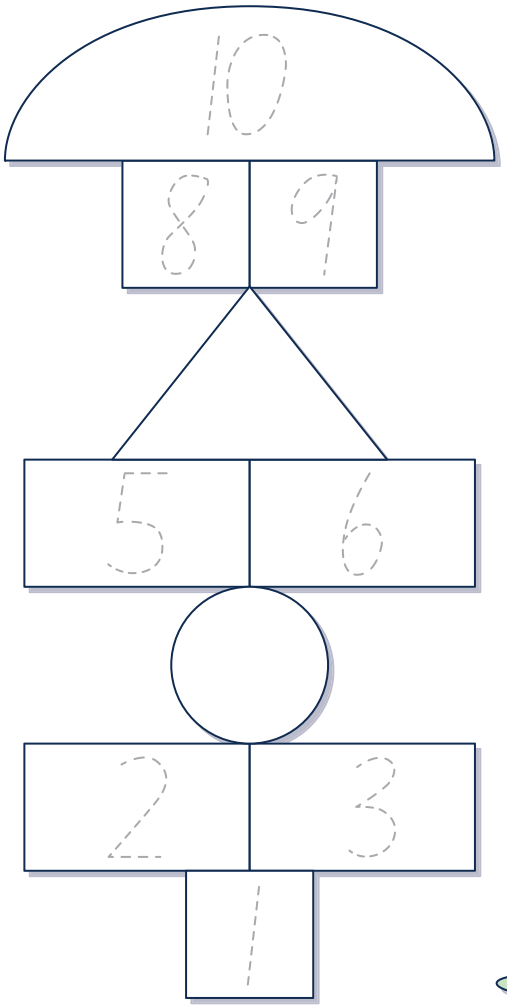
Access the **resources** @ Maths Trek Online.

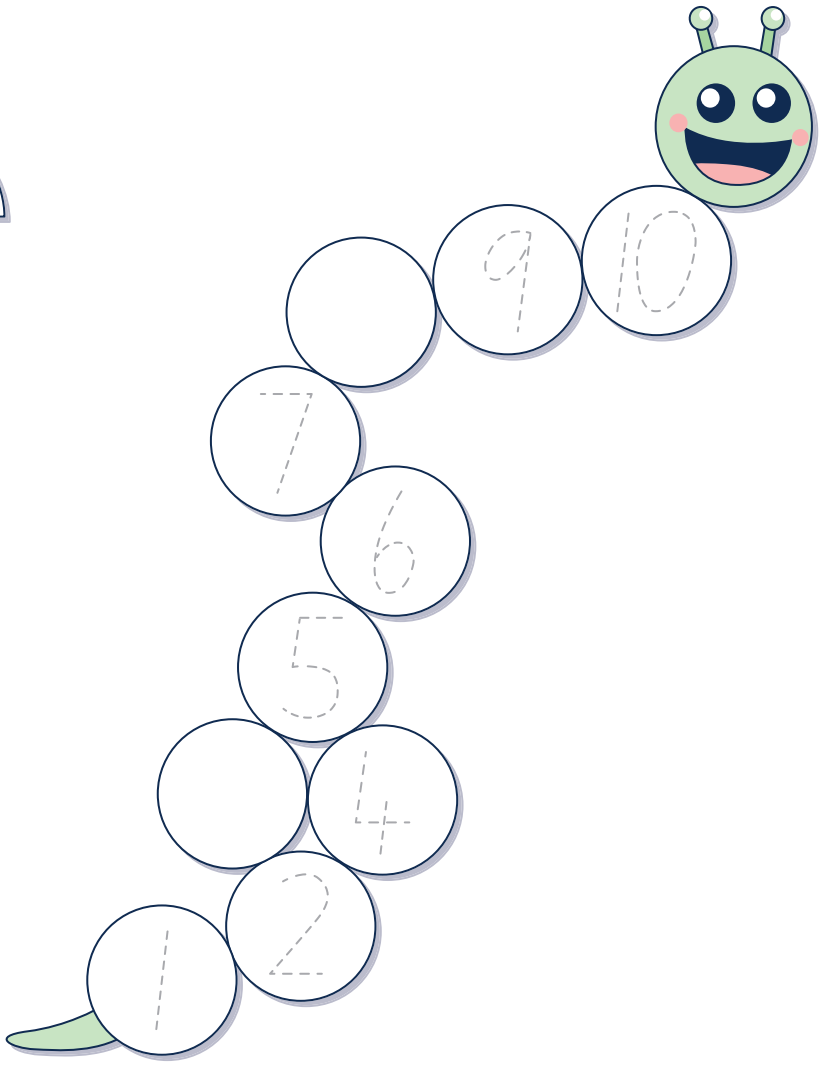


Bring maths to life

Designed to be conducted over a week, every investigation is packed with opportunities for your students to apply their maths skills to unfamiliar, extended problems.

Talk about the shapes in the hopscotch designs.
Trace the numbers. Write the missing numbers.





The Maths Trek Program

Maths Trek is a whole-school numeracy program for Kindergarten to Year 6 that develops mathematical understanding, fluency, reasoning and problem-solving skills.

The Student Book together with the explicit teaching resources at Maths Trek Online build, develop and strengthen each student's ability to work mathematically.

Use the comprehensive online teaching resources to explicitly teach each concept before students apply their learning in the Student Book.

Matched to the NSW Syllabus

In this book students will find ...

- scaffolded activities for every topic with opportunities to reflect and communicate understanding
- concepts revisited and developed throughout the year
- investigations where students apply maths skills to unfamiliar, extended mathematical problems to strengthen connections between concepts
- regular revision activities to consolidate learning

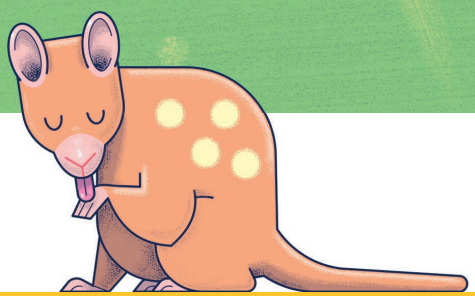
At Maths Trek Online teachers will find ...

- explicit teaching slides and lesson guides for every topic
- engaging visuals and hands-on activities in every lesson
- differentiation tasks
- interactive teaching tools
- counting and sequencing songs
- investigation videos
- digital and printable resources to guide students through every investigation
- formative and summative assessments

Maths Trek Online includes the teaching resources for all year levels and complimentary access to the student site.

Head to www.fireflyeducation.com.au/mathstrek to:

- view Maths Trek sample pages from other year levels
- download the NSW Syllabus Match and Yearly Plan documents
- sign up for a free trial of the online teaching resources
- book a free professional learning workshop for your school.



Maths Trek